

## Opti-Probe 3260-3290



The Therma-Wave Opti-Probe 3260 and 3290 are the second generation system used for measurement of a wide range of optical parameters such as film thickness of multiple layers and index of refraction. Compatible with wafers ranging from 4- to 8-inches, the system has two cassette loader stations. The Opti-Probe supports Beam Profile Reflectometry (BPR) and Beam Profile Ellipsometry (BPE) modes to provide accurate feedback for CMP process control. A 675 nm thermoelectrically cooled diode laser is used to establish the optical parameter in BPR/BPE mode, and in spectrometry mode a visible 450 to 840 nm tungsten halogen lamp is used.

- Supports the full range of thick and thin film, refractive indexes, extinction coefficient and reflectivity measurements
- Multi-layer and multi-parameter measurements on thin ONO and OPO film stacks
- Small micro-ellipsometer spot size (0.9 micron) eliminates under- and over-polishing
- Enables control of polish rate and detection of polish slopes on areas as small as 7 micron x 7 micron

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For Therma-Wave refurbished metrology equipment:  
[info@entrepix.com](mailto:info@entrepix.com)

For Therma-Wave metrology spare parts:  
[parts@entrepix.com](mailto:parts@entrepix.com)

For Therma-Wave service or maintenance:  
[service@entrepix.com](mailto:service@entrepix.com)

Or Call:  
602-426-8677 (Sales)

### Options:

- DUV: adds DUV Spectroscopy: 210 to 850nm
- Opti-Probe 670 nm Fiber Optic Laser Upgrade Kit: extend the life of laser and ease of change out
- Opti-Probe N2 Purge Kit: prevent contamination build up on optics

## Opti-Probe 3260-3290

- Single recipes are robust enough to provide correct results over large variations in post-CMP thicknesses
- Spectrometer light source is can be changed in 15 minutes without any optics recalibration
- Long-life light sources eliminate frequent changes and requalification

BPR (Beam Profile Reflectometry : thick dielectric films > 500A)

BPE (Beam Profile Ellipsometry : thin dielectric films < 500A)

Spectrometry (High Index films : C-Si, Poly-Si, A-Si)

## **Preventative Maintenance Program**

### **Overview**

- Pre-PM Verification
- Hard Disk Maintenance
- Electrical Checks
- Facilities Checks
- Motor System Inspection
- Wafer Handling
- Auto Focus System
- Spectrometer
- System General
- System Close-up
- Post-PM Measurements